Procedures for Approval of Foreign Manufacturers and Independent Inspection Agencies in the Manufacture of DOT Specification or DOT Special Permit Compressed Gas Cylinders

Administering U.S. Government Agency

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

Office of Hazardous Materials Safety

Office of Hazardous Materials Special Permits and Approvals Approvals Program, PHH-32

400 7th Street, S.W.

Washington, DC 20590-0001 Phone: (202) 366-4512 Fax: (202) 366-3308 Website: http://hazmat.dot.gov

<u>Approval of Foreign Gas Cylinder Manufacturers and Independent Inspection</u> <u>Agencies</u>

In accordance with the United States cylinder regulations under Title 49, Code of Federal Regulations (49 CFR), Parts 100-185, specifically, Sections 173.301(j), 107.807, 107.803 and 178.35(b), only cylinders that are manufactured to a DOT specification or DOT special permit are authorized to be transported to, from, and within the United States. Under a program designated the 'HM-74 foreign cylinder approval program', any cylinder manufacturer located outside the United States must be approved by the Office of Hazardous Materials Special Permits and Approvals under Section 107.807 (Approval of non-domestic chemical analyses and tests), and must employ an Independent Inspection Agency (IIA) approved by DOT under Section 107.803 (Approval of independent inspection agency), before any cylinders may be manufactured, inspected, certified, and marked to a DOT specification or DOT special permit.

The manufacturer and IIA must submit applications for approval and must jointly or separately prepare a quality control manual which demonstrates production and inspection procedures based on the relevant cylinder specification or special permit and Section 178.35(c) of 49 CFR, and relates those procedures to that specification or special permit. No formal approval forms are required. However, the applications must be made in accordance with Sections 107.807 and 107.803 for the manufacturer and the IIA, respectively. An applicant under these sections may be either a person or a corporation. Once all documents have been reviewed and found acceptable, the applicant is notified regarding details of a required on-site inspection to be conducted by a DOT representative.

A DOT approval inspection consists of witnessing and reviewing manufacturing, inspection and test procedures of a designated cylinder lot, produced to a DOT specification or special permit. This will include but not be limited to the following: a review of all controls; traceability of raw material and partially completed cylinders through production, witness a lab check analysis of the heat (or heats) of raw material used in production of the lot; observe the independent inspection agency performing the duties as required in Section 178.35(c) of 49 CFR and the cylinder specification or special permit; witness all inspections and tests required for new manufactured cylinders; and a review of the test results.

During the inspection, sample cylinders are selected from the lot for on-site testing. If the procedure and controls are deemed acceptable, and all test results obtained from the sample cylinders comply with the specification or special permit requirements, an additional group of cylinders are randomly selected from the same lot which the manufacturer must ship to a contract test lab in the United States for verification testing. At the conclusion of the inspection, the DOT representative will advise the manufacturer where the sample cylinders are to be sent in the US. If the results of the verification testing comply with the specification or special permit requirements and corroborate test results obtained during the inspection, an approval is issued to the manufacturer and an approval is issued to the independent inspection agency for that manufacturer's facility location.

Cost:

The manufacturer must submit an advance deposit to cover all direct costs related to the inspection, such as air fare, food, lodging, and other incidental costs. The cost of verification testing at a contract test lab in the U.S. is between the manufacturer and the U.S. lab. DOT is not involved in any costs related to the verification testing. All direct costs of each inspection are the responsibility of the manufacturer, with no costs to the U.S. Government.

Prior to scheduling the approval inspection, the manufacturer must submit the following:

- 1. An application for approval under Section 107.807 of Title 49 Code of Federal Regulations (49 CFR), and a quality control manual which demonstrates the production processes by relating those procedures to the DOT specification or special permit.
- 2. Technical documentation including cylinder design drawings and wall stress calculations for each design, certified by the IIA to be in compliance with the relevant DOT specification or special permit. The drawings must be in English and all dimensions in U.S. units of measurement.
- 3. A written request for a DOT approval inspection.

4. An advance deposit in the form of a check made out to 'The United States Department of Transportation', indicating on the check that it is for the HM74 account, and forwarded to:

DOT FAA
Mike Monroney Aeronautical Center
General Accounting Division, AMZ-300
ATT: Toan Nguyen or Shelley Willis, Accountants
P.O. Box 25770
Oklahoma City, OK 73125-4915

The deposit may be electronically submitted using the attached instructions.

The advance deposit may be submitted with the request for the inspection or when inspection dates have been confirmed.

Prior to scheduling the approval inspection, the Independent Inspection Agency (IIA) must submit the following:

- 1. An application for approval under Section 107.803 of 49 CFR, quality assurance procedures, and an inspection plan based on the relevant DOT specification or special permit and Section 178.35(c) of 49 CFR, relating the inspection procedures to the DOT specification or special permit.
- 2. A preliminary audit is required to be performed by the IIA with design qualification testing conducted to certify that the design meets compliance with the DOT specification or special permit. The IIA must submit documentation indicating a current audit was performed with certified test results showing that the prototype cylinders comply with the DOT specification or special permit.

Additional information required from the manufacturer and Independent Inspection Agency.

Non-domestic manufacturers and independent inspection agencies must include in their applications, a designation of an agent for service of process under Section 105.40 of 49 CFR. It is not practical for one party to act as agent for service for both the manufacturer and the IIA.